



DOCKET NO.: B0801.70231US00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Lee et al.
Serial No.: 10/024607
Confirmation No.: 6830
Filed: November 8, 2001
For: CARDIOVASCULAR DISEASE DIAGNOSTIC AND
THERAPEUTIC TARGETS
Examiner: Bruce D. Hissong
Art Unit: 1646

Certificate of Mailing Under 37 CFR 1.8(a)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as First Class Mail, in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: May 30, 2006

Signature: 

(Nicole Millette Hawes)

MAIL STOP RCE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

STATEMENT FILED PURSUANT TO THE DUTY OF
DISCLOSURE UNDER 37 CFR §§1.56, 1.97 AND 1.98

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, the Applicant requests consideration of this Information Disclosure Statement.

PART I: Compliance with 37 C.F.R. §1.97

This Information Disclosure Statement has been filed before the mailing of a first Office action after the filing of a request for continued examination under 37 C.F.R. §1.114. No fee or certification is required.

PART II: Information Cited

The Applicant hereby makes of record in the above-identified application the information listed on the attached form PTO-1449 (modified PTO/SB/08). The order of presentation of the references should not be construed as an indication of the importance of the references.

PART III: Remarks

Documents cited anywhere in the Information Disclosure Statement are enclosed unless otherwise indicated. It is respectfully requested that:

1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;
2. The enclosed form PTO-1449 (modified PTO/SB/08) be signed by the Examiner to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application;
3. The citations for the information be printed on any patent which issues from this application.

By submitting this Information Disclosure Statement, the Applicant makes no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

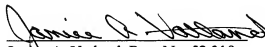
By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicant, the Examiner is urged to form his or her own conclusion regarding the relevance of the cited information.

An early and favorable action is hereby requested.

Respectfully submitted,



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Docket No.: B0801.70231US00
Date: May 30, 2006
xNDDx



FORM PTO-1449/A and B (modified PTO/SB/08)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

APPLICATION NO.: 10/024607

ATTY. DOCKET NO.: B0801.70231US00

FILING DATE: November 8, 2001

CONFIRMATION NO.: 6830

APPLICANT: Lee et al.

GROUP ART UNIT: 1646

EXAMINER: Bruce D. Hissong

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U.S. PATENT DOCUMENTS

Examiner's Initials #	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		Number	Kind Code		
	A3	5,217,899		Shapiro et al.	06-08-1993
	A4	5,348,879		Shapiro et al.	09-20-1994
	A5	2002/0072674		Criton et al.	06-13-2002

FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document			Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)
		Office/Country	Number	Kind Code		
	B5	JP	6178687		Tominaga Shinichi	06-28-1994
	B6	JP	7031479		Tominaga Shinichi	02-03-1995

OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
	C5	GenBank Submission; NIH/NCBI; Accession No. NP_003847.	
	C6	GenBank Submission; NIH/NCBI; Accession No. NM_007856.	
	C7	GenBank Submission; NIH/NCBI; Accession No. NP_057316.	
	C8	GenBank Submission; NIH/NCBI; Accession No. NM_016232.	
	C9	GenBank Submission; NIH/NCBI; Accession No. D13605.	
	C10	GenBank Submission; NIH/NCBI; Accession No. Y07519.	
	C11	GenBank Submission; NIH/NCBI; Accession No. AAA67172.	
	C12	GenBank Submission; NIH/NCBI; Accession No. D12763.	
	C13	GenBank Submission; NIH/NCBI; Accession No. E07716.	
	C14	GenBank Submission; NIH/NCBI; Accession No. AB012701.	
	C15	GenBank Submission; NIH/NCBI; Accession No. AB029084.	

EXAMINER:

/Bruce Hissong/

DATE CONSIDERED:

03/26/2008

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /BH/

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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APPLICATION NO.: 10/024607	ATTY. DOCKET NO.: B0801.70231US00
FILING DATE: November 8, 2001	CONFIRMATION NO.: 6830
APPLICANT: Lee et al.	
GROUP ART UNIT: 1646	EXAMINER: Bruce D. Hissong

C16	GenBank Submission, NIH/NCBI, Accession No. D12764.	
C17	GenBank Submission, NIH/NCBI, Accession No. U04319.	
C18	GenBank Submission, NIH/NCBI, Accession No. NM_015037.	
C19	GenBank Submission, NIH/NCBI, Accession No. U04317.	
C20	GenBank Submission, NIH/NCBI, Accession No. E00652.	
C21	GenBank Submission, NIH/NCBI, Accession No. AC007248.	
C22	AUKRUST et al., Cytokine network in congestive heart failure secondary to ischemic or idiopathic dilated cardiomyopathy. Am J Cardiol. 1999 Feb 1;83(3):376-82.	
C23	BROWN, Techniques for mechanical stimulation of cells in vitro: a review. J Biomech. 2000 Jan;33(1):3-14. Review.	
C24	CHENG et al., Mechanical strain tightly controls fibroblast growth factor-2 release from cultured human vascular smooth muscle cells. Circ Res. 1997 Jan;80(1):28-36.	
C25	COYLE et al., Crucial role of the interleukin 1 receptor family member T1/ST2 in T helper cell type 2-mediated lung mucosal immune responses. J Exp Med. 1999 Oct 4;190(7):895-902.	
C26	DE KEULENAER et al., Identification of IEX-1 as a biomechanically controlled nuclear factor-kappaB target gene that inhibits cardiomyocyte hypertrophy. Circ Res. 2002 Apr 5;90(6):690-6.	
C27	FENG et al., Transcriptional profile of mechanically induced genes in human vascular smooth muscle cells. Circ Res. 1999 Dec 3-17;85(12):1118-23.	
C28	GWECHENBERGER et al., Cardiac myocytes produce interleukin-6 in culture and in viable border zone of reperfused infarctions. Circulation. 1999 Feb 2;99(4):546-51.	
C29	HIROTA et al., Loss of a gp130 cardiac muscle cell survival pathway is a critical event in the onset of heart failure during biomechanical stress. Cell. 1999 Apr 16;97(2):189-98.	
C30	IWAHANA et al., Different promoter usage and multiple transcription initiation sites of the interleukin-1 receptor-related human ST2 gene in UT-7 and TM12 cells. Eur J Biochem. 1999 Sep;264(2):397-406.	
C31	IZAKOV et al., Cooperative effects due to calcium binding by troponin and their consequences for contraction and relaxation of cardiac muscle under various conditions of mechanical loading. Circ Res. 1991 Nov;69(5):1171-84.	
C32	JOYCE et al., Two inhibitors of pro-inflammatory cytokine release, interleukin-10 and interleukin-4, have contrasting effects on release of soluble p75 tumor necrosis factor receptor by cultured monocytes. Eur J Immunol. 1994 Nov;24(11):2699-705.	
C33	LÖHNING et al., T1/ST2 is preferentially expressed on murine Th2 cells, independent of interleukin 4, interleukin 5, and interleukin 10, and important for Th2 effector function. Proc Natl Acad Sci U S A. 1998 Jun 9;95(12):6930-5.	
C34	MACGOWAN et al., Circulating interleukin-6 in severe heart failure. Am J Cardiol. 1997 Apr 15;79(8):1128-31.	
C35	MANN et al., Stress activated cytokines and the heart. Cytokine Growth Factor Rev. 1996 Dec;7(4):341-54.	
C36	MITCHAM et al., T1/ST2 signaling establishes it as a member of an expanding interleukin-1 receptor family. J Biol Chem. 1996 Mar 8;271(10):5777-83.	
C37	MURPHY et al., Signaling and transcription in T helper development. Annu Rev Immunol. 2000;18:451-94.	

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DATE CONSIDERED:

03/26/2008

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FORM PTO-1449 (Rev. 8/2006) (modified PTO/SB/08)		APPLICATION NO.: 10/024607	ATTY. DOCKET NO.: B0801.70231US00
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		FILING DATE: November 8, 2001	CONFIRMATION NO.: 6830
		APPLICANT: Lee et al.	
Sheet	3 of 4	GROUP ART UNIT: 1646	EXAMINER: Bruce D. Hissong

C38	MURRAY et al., Chronic beta-adrenergic stimulation induces myocardial proinflammatory cytokine expression. Circulation. 2000 May 23;101(20):2338-41.	
C39	NICHOLS et al., The influence of 'diastolic' length on the contractility of isolated cat papillary muscle. J Physiol. 1985 Apr;361:269-79.	
C40	NG et al., Diagnosis of heart failure using urinary natriuretic peptides. Clin Sci (Lond). 2004 Feb;106(2):129-33.	
C41	OHTSUKA et al., Effect of beta-blockers on circulating levels of inflammatory and anti-inflammatory cytokines in patients with dilated cardiomyopathy. J Am Coll Cardiol. 2001 Feb;37(2):412-7.	
C42	O'NEILL et al., The IL-1 receptor/toll-like receptor superfamily: crucial receptors for inflammation and host defense. Immunol Today. 2000 May;21(5):206-9.	
C43	POTTER et al., Mutations in the murine fitness 1 gene result in defective hematopoiesis. Blood. 1997 Sep 1;90(5):1850-7.	
C44	PRABHU et al., beta-adrenergic blockade in developing heart failure: effects on myocardial inflammatory cytokines, nitric oxide, and remodeling. Circulation. 2000 May 2;101(17):2103-9.	
C45	PULKKI et al., Cytokines and cardiomyocyte death. Ann Med. 1997 Aug;29(4):339-43.	
C46	ROIG et al., Serum interleukin-6 in congestive heart failure secondary to idiopathic dilated cardiomyopathy. Am J Cardiol. 1998 Sep 1;82(5):688-90, A8.	
C47	SCHAFER et al., Device for the application of a dynamic biaxially uniform and isotropic strain to a flexible cell culture membrane. J Orthop Res. 1994 Sep;12(5):709-19.	
C48	SUTTON et al., Left ventricular remodeling after myocardial infarction: pathophysiology and therapy. Circulation. 2000 Jun 27;101(25):2981-8.	
C49	TOMINAGA et al., The existence of a growth-specific DNA binding factor for the promoter region of mouse ST2 gene. FEBS Lett. 1994 Nov 14;354(3):311-4.	
C50	TOMINAGA et al., A putative protein of a growth specific cDNA from BALB/c-3T3 cells is highly similar to the extracellular portion of mouse interleukin 1 receptor. FEBS Lett. 1989 Dec 4;258(2):301-4.	
C51	TOWNSEND et al., T1/ST2-deficient mice demonstrate the importance of T1/ST2 in developing primary T helper cell type 2 responses. J Exp Med. 2000 Mar 20;191(6):1069-76.	
C52	TREHU et al., Phase I trial of interleukin 2 in combination with the soluble tumor necrosis factor receptor p75 IgG chimera. Clin Cancer Res. 1996 Aug;2(8):1341-51.	
C53	TSUTAMOTO et al., Interleukin-6 spillover in the peripheral circulation increases with the severity of heart failure, and the high plasma level of interleukin-6 is an important prognostic predictor in patients with congestive heart failure. J Am Coll Cardiol. 1998 Feb;31(2):391-8.	
C54	VAHL et al., Length dependence of calcium- and force-transients in normal and failing human myocardium. J Mol Cell Cardiol. 1998 May;30(5):957-66.	
C55	YAMAMOTO et al., Induction of tenascin-C in cardiac myocytes by mechanical deformation. Role of reactive oxygen species. J Biol Chem. 1999 Jul 30;274(31):21840-6.	
C56	YAMAMOTO et al., Mechanical strain suppresses inducible nitric-oxide synthase in cardiac myocytes. J Biol Chem. 1998 May 8;273(19):11862-6.	
C57	YAMAMOTO et al., Regulation of cardiomyocyte mechanotransduction by the cardiac cycle. Circulation. 2001 Mar 13;103(10):1459-64.	

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Sheet	4	of	4

	C58	YAMAOKA et al., Anti-inflammatory cytokine profile in human heart failure: behavior of interleukin-10 in association with tumor necrosis factor-alpha. <i>Jpn Circ J.</i> 1999 Dec;63(12):951-6.	
	C59	YANAGISAWA et al., Presence of a novel primary response gene ST2L, encoding a product highly similar to the interleukin 1 receptor type 1. <i>FEBS Lett.</i> 1993 Feb 22;318(1):83-7.	
	C60	YANAGISAWA et al., The expression of ST2 gene in helper T cells and the binding of ST2 protein to myeloma-derived RPMI8226 cells. <i>J Biochem (Tokyo).</i> 1997 Jan;121(1):95-103.	

*a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. __, filed __, and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

[NOTE - No copies of U.S. patents, published U.S. patent applications, or pending, unpublished patent applications stored in the USPTO's Image File Wrapper (IFW) system, are included. See 37 CFR §1.98 and 1287OG163. Copies of all other patent(s), publication(s), unpublished, pending U.S. patent applications, or other information listed are provided as required by 37 CFR §1.98 unless 1) such copies were provided in an IDS in an earlier application that complies with 37 CFR §1.98, and 2) the earlier application is relied upon for an earlier filing date under 35 U.S.C. §120.]

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